

Amendments to the Specification:

Please amend the specification as follows:

In the paragraph beginning at page 5, line 5, amend as follows:

Another class of disadvantages relating to the conventional reader under writer design relates to magnetic issues. With the commonly-used unshielded monopole write structure, placing the writer on top of the reader does not cause significant magnetic difficulties. However, the unshielded pole writer of the previously-discussed '949 patent has significant performance advantages due to higher field gradient which allows for higher linear bit density and it has a larger longitudinal field component which improves the effective write field strength which allows for the use of higher coercivity media with finer grains. Simply placing such a writer on top of a shielded GMR reader, however, results in the generation of excessive field under the writer shield because of flux coupling between the writer structure and the reader shields. This coupling can be reduced to an optimum level by placing a bucking coil between the writer structure and the reader structure as is taught in a commonly-owned U.S. patent application filed on the same day herewith and given U.S. Patent Application No. 10/701,909, entitled "Shielded Pole Writer" and designated as Attorney Docket No. 3123-528, the contents of which are incorporated herein by reference. This bucking coil is in series with the write coil and adds extra resistance and therefore power dissipation, thus contributing to heating and pole tip protrusion.

In the paragraph beginning at page 13, line 21, amend as follows:

As is shown in Fig. 2, with the current flowing in the coil 62 as shown, a magnetic field is created in an upper layer 80 of the adjacent media 74 in a direction from the SUL 72 toward the write pole tip 68. The upper layer 80 of the adjacent media 74 may have perpendicular uniaxial anisotropy and the SUL 72 may be a low reluctance layer. Alternatively, the magnetic media

may have longitudinal uniaxial anisotropy as is taught in commonly-owned U.S. Patent Application No. 10/697,075, filed October 30, 2003, entitled "Longitudinal Media with Soft Underlayer and Perpendicular Write Head" and designated as Attorney Docket No. 3423-526, the contents of which are incorporated herein by reference.

In the paragraph beginning at page 15, line 16, amend as follows:

As can be appreciated, with this second read/write head 90, the majority of the return field is returned to the SUL from the write shield 92 rather than through the first and second read shields 94 and 98, however, a portion will return through the read shields. The amount by which the write shield 92 is spaced apart from the first read shield 94 and the facing surface areas of these two shields will largely determine the amount of magnetic flux which passes through the read shield 94 during the writing operation. This distance and these surface areas can be selected so as to provide a desired reduction of flux therethrough. It is desirable to minimize the write flux in the read shields 94 and 98 so as not to induce reader instability caused by excessive write flux. More detail on this selection can be found in a commonly-owned U.S. patent application filed on the same day herewith and given U.S. Patent Application No. 10/701,909, entitled "Shielded Pole Writer" and designated as Attorney Docket No. 3423-528, the contents of which are incorporated herein by reference. Again, this second read/write head 90 provides an arrangement with desirable magnetic fields created by the write pole tip 102 without overly large return fields that affect recorded data nearby. All of this is accomplished with the single pancake coil 108.